Prerequisites and Entrance Exam

I am teaching 102 as a “theory-course”. This means that there is no programming. On the other hand, there is a lot of proof writing and the course is homework intensive. It has been my experience that a significant fraction of the students entering 102, about 25%, are very poorly prepared in terms of their abstraction and proof-writing skills, in spite of having fulfilled the prerequisites.

[Long paragraph about why this is happening, what I have done in the past to address it, what is fair, what would be best, what is the role of the university in society, etc. deleted.]

To address this issue I have decided to institute a “take-in” exam for the class. Here is how it goes:

• The exam will take place on Tuesday January 15th, 2008.

• It will cover material you are supposed to already know from CE16 and CS101. You should PREPARE yourself by studying before the exam, ideally over Christmas break.

  If you can do well on THIS EXAM you have nothing to fear:
  

• The exam will be graded on a Pass/Fail basis and counts 15% towards your final grade.

• If you fail the exam on the 15th you get to try again on the 22nd. If you fail again, PLEASE take this as a VERY STRONG suggestion to drop the class. Past experience has shown that students who can not pass the take-in exam have essentially no chance of passing the class.

• What should you do? I believe that an excellent preparation would be Math 100.

See next page for the remaining information about the class.
Prerequisites: All students must have successfully completed CMPS 101. Transfer students must have credit for this course approved by the CIS/CE board office.

Main text (required): Algorithm Design, by Kleinberg and Tardos.

Course Work: The course will be taught like a math course, not like a programming course. You will have regular written assignments, two in-class midterms, and a final examination. Regarding the weight of homework towards you final grade you get to choose between one of the following two schemes:

<table>
<thead>
<tr>
<th></th>
<th>Default</th>
<th>Homework-heavy</th>
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<tbody>
<tr>
<td>Entrance Exam</td>
<td>15</td>
<td>Entrance Exam 15</td>
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<tr>
<td>Homeworx</td>
<td>15</td>
<td>Homeworks 40</td>
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<tr>
<td>First Midterm</td>
<td>10</td>
<td>First Midterm 10</td>
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<tr>
<td>Second Midterm</td>
<td>10</td>
<td>Second Midterm 10</td>
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<tr>
<td>Final</td>
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<td>Final 25</td>
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Indicate your choice on the front page of you first assignment. This choice will be final. If you don’t indicate a choice, the Default scheme will apply. I strongly encourage you to take the homework-heavy option, especially if exams tend to stress you out and you could use a regular stimulus against slacking. You will also learn more.

I will give an incomplete grade only if there has been a medical/family emergency and the student has been doing at least average work.

Important Rule: If you chose the Homework-heavy option you will be subject to the following rule. On each of the three exams (two mid-terms, final) there will be one question from a past homework. For that question, your exam-answer should be at least 75% as good as your homework answer (allowances will be made for presentation and minor details). If that’s not the case, then you will get a score of 0 for that question on the exam and you will be reverted to the Default grading scheme.

Assignments: Do not cheat.

Remember: if you don’t cheat, you might lower your grade; if you do cheat you will lower yourself. If you believe that it is OK to cheat, e.g., because you “shouldn’t have to take this class”, do the honorable thing and bring this up in the first day of class. Really. It’s a valid subject. It’ll be OK.

In any case: the Computer Science Department of UCSC has a zero tolerance policy for any incident of academic dishonesty. If cheating occurs, consequences within the context of the course may range from getting zero on a particular assignment, to failing the course. In addition, every case of academic dishonesty will be referred to the students college Provost, who sets in motion an official disciplinary process. Cheating in any part of the course may lead to failing the course and suspension or dismissal from the university.

What is cheating? In short, it is presenting someone else’s work as your own. Examples would include copying another student’s written homework assignment, or allowing your own work to be copied. Although you may discuss problems with fellow students, use the following rule of thumb:

What you turn in as your homework should be something that you could reproduce alone a month later given nothing but pen, paper and a copy of the textbook.

And, certainly, legitimate collaboration ends when you “lend”, “borrow”, or “trade” written solutions to problems, or in any way share in the act of writing your answers. When you do collaborate (legitimately) or receive help from anyone, you must credit them by placing their name(s) at the top of your paper. It really is OK and will not cost you grades.